What is claimed is:

1. A process for producing a formed honeycomb body, which comprises mixing, by a mixer, a raw material for forming a honeycomb body structure containing at least a ceramic raw material powder, a binder and water, to obtain a compounded mixture for forming a green body, and kneading and extruding the compounded mixture for forming a green body into a honeycomb shape by a continuous extruder, to obtain a formed honeycomb body,

wherein there is added in a predetermined amount, to a raw material for forming a honeycomb body structure, a powdery material obtained by crushing, into the maximum particle diameter of 50 mm or smaller, a crushed green body having substantially same composition as a compounded mixture for forming a green body, and a resulting mixture is mixed thoroughly by a mixer to obtain a compounded mixture for forming a green body.

2. A process for producing a formed honeycomb body according to Claim 1, wherein the ceramic raw material powder contains a regenerated raw material powder obtained by drying a green body having substantially same composition as a compounded mixture for forming a green body and crushing the dried green body.

3. A process for producing a formed honeycomb body according to Claim 1, wherein the crushed green body is added in an amount of 30 parts by mass or less relative to 100 parts by mass of the ceramic raw material powder.

4. A process for producing a formed honeycomb body according to Claim 2, wherein the crushed green body is added in an amount of 30 parts by mass or less relative to 100

parts by mass of the ceramic raw material powder.

5. A process for producing a formed honeycomb body according to Claim 1, wherein raw materials for forming a honeycomb body structure are mixed by a mixer, then the crushed green body is added thereto in the form of powdery material, and a resultant is mixed by a mixer to obtain the compounded mixture for forming a green body.

6. A process for producing a formed honeycomb body according to Claim 2, wherein raw materials for forming a honeycomb body structure are mixed by a mixer, then the crushed green body is added thereto in the form of powdery material, and a resultant is mixed by a mixer to obtain the compounded mixture for forming a green body.

7. A process for producing a formed honeycomb body according to Claim 3, wherein raw materials for forming a honeycomb body structure are mixed by a mixer, then the crushed green body is added thereto in the form of powdery material, and a resultant is mixed by a mixer to obtain the compounded mixture for forming a green body.

8. A process for producing a formed honeycomb body according to Claim 1, wherein a single-screw or multi-screw extruder or kneader is used as the continuous extruder.

9. A process for producing a formed honeycomb body according to Claim 2, wherein a single-screw or multi-screw kneading extruder is used as the continuous extruder.

10. A process for producing a formed honeycomb body according to Claim 3, wherein a single-screw or multi-screw kneading extruder is used as the continuous extruder.

11. A honeycomb structure being made of a sintered cordierite material having a large number of pores and a

specific total volume shared by distributed pores of 0.140 cc/g or less; and containing at least 30 parts by mass of said sintered cordierite material being originated from a crushed green body in the form of powdery material.

12. A honeycomb structure according to Claim 6, having a thermal expansion coefficient of 0.2 to 0.35 x 10^{-5}/℃ as measured according to the method described in JIS R 1618.